



Report of new cultivar 'INIVIT MX 2010' NEW CULTIVAR OF WHITE COCOYAM *Xanthosoma sagittifolium* (L.) SCHOTT FOR CUBAN AGRICULTURE

Informe de nuevo cultivar 'INIVIT MX 2010' Nuevo cultivar de malanga blanca *Xanthosoma sagittifolium* (L.) Schott para la agricultura cubana

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ABSTRACT. The need to have new cultivars of malanga *Xanthosoma*, preferably with white rhizomes, high yields and according to the demanding palates is a problem to be solved by the improvement program of the Research Institute of Tropical Viands (INIVIT according its acronyms in Spanish), of which is part of the present work. The improvement of the cocoyam (*Xanthosoma* spp.) has its limitations in Cuba because the emission of inflorescences is very sporadic in the commercially important species as food and the hybridization does not occur naturally. 'INIVIT MX-2010' is a new cultivar obtained by the classical method of clonal selection in the Cuban *Xanthosoma* cocoyam germplasm collection, which also includes cultivars currently considered as commercial, which has high yields, quality for consumption and can be harvested from the nine months of planting. It is registered in the Register of Commercial Varieties of the Direction of Seeds and Plant Genetic Resources of Ministry of Agriculture.

Key words: cultivars, cocoyam, genetic improvement, yield

INTRODUCTION

Genetic improvement of crops is one of the most important tools in the effort to increase food production. In Cuba, the genus *Xanthosoma* is the one of greater importance in the preference of the population in relation to others of the edible araceae. Although purple mass cultivars have shown the best performance values under different edaphoclimatic conditions, there has traditionally been the preference of consumers for white mass as a potential alternative to satisfy palate requirements and nutritional needs of the general population, not to mention confronting the effects of climate change. This has suggested the need to deepen the studies of cultivars with white rhizomes. Evaluations carried out in the Cuban germplasm collection of *Xanthosoma* spp. As well as the results of the improvement program through the present work, showed the superiority of 'INIVIT MX-2010'.

RESUMEN. La necesidad de contar con nuevos cultivares de malanga *Xanthosoma*, preferiblemente, con rizomas de masa blanca, altos rendimientos y acorde a los paladares exigentes constituye un problema a resolver por el programa de mejoramiento del Instituto de Investigaciones de Viandas Tropicales (INIVIT), del cual forma parte el presente trabajo. El mejoramiento de la malanga (*Xanthosoma* spp.) tiene sus limitaciones en Cuba porque la emisión de inflorescencias es muy esporádica en las especies comercialmente importantes como alimento y la hibridación no ocurre naturalmente. 'INIVIT MX-2010' es un nuevo cultivar obtenido por el método clásico de selección clonal en la colección cubana de germoplasma de malanga del género *Xanthosoma* que incluye también los cultivares actualmente considerados como comerciales, que posee altos rendimientos, calidad para consumo y se puede cosechar desde los nueve meses de plantada. Se encuentra inscripto en el Registro de Variedades Comerciales de la Dirección de Semillas y Recursos Fitogenéticos del Ministerio de la Agricultura.

Palabras clave: cultivares, malanga, mejoramiento genético, rendimiento

ORIGIN

It is a new cultivar obtained by the classic method of clonal selection from the 'Amarilla riza' accession of the white and yellow groups (46 accessions) of the Cuban collection including the commercial ones, by their white rhizomes, high yield potential, short cycle and excellent culinary properties of the rhizomes. It has shown good response in different edaphoclimatic conditions of the country and its multiplication is continued by agamic route.

CULTIVAR DESCRIPTION 'INIVIT MX-2010'

Height of plant: 0,31-0,50 m
Color of the buds of the rhizomes (corns and comels): yellowish white
Color of the mass of rhizomes or corns: white
Form of the secondary rhizomes or comels: elongated-conical
Leaf blade shape and margin: arrow shaped and whole margin
Leaf blade color by beam and underside: green
Color of the petiole, edge and basal part: green, yellowish white base
Presence of wax on the petiole: wax covers 2/3
Tillering: abundant
Harvest cycle: from nine months
Potential yield: 23 t ha⁻¹
Palate: excellent

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